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REMARKS

In the present Office Action Claims 1-46 and 60-63 were examined. Claims 1-46 and 60-63 were rejected, and no claims were allowed. The Office Action makes the rejections of Claims 1-46 and 60-63 final.

By this Amendment and Response, Claims 1, 33, 34, 60, 62 and 63 are proposed to be amended, no claims are proposed to be cancelled and no claims are proposed to be added. Accordingly, Claims 1-46 and 60-63 are presented in this Amendment and Response. Reconsideration and allowance in view of the proposed amendments and remarks to follow is respectfully requested.

Objections to Specification under 35 U.S.C. §112, first paragraph:

In Section 3 of the Office Action the Examiner objects to the specification as filed under 35 U.S.C. §112, first paragraph, as failing to adequately teach the limitations of an "instantiated script" and "real-time consideration" as recited in independent Claims 1, 33, 34, 60 and 63.

It is respectfully submitted that one skilled in the art would find adequate support for these terms within the original disclosure of the present invention, e.g., the specification, claims and drawings, as filed. However, in order to streamline further prosecution, proposed amendments have been made to Claims 1, 33, 34, 60, 62 and 63 to remove these limitations.

In view of the proposed amendments, it is respectfully requested that the Examiner withdraw the objection to the specification.

Rejections under 35 U.S.C. §103:

The Examiner maintains and now <u>makes final</u> the rejection of Claims 1-46, 60, 61 and 63 under 35 U.S.C. §103(a) as being unpatentable over <u>Skillman et al.</u> (U.S. Patent No. 5,506,999) in view of <u>Fischer</u> (U.S. Patent No. 5,337,360). The Examiner also maintains and <u>makes final</u> the rejection of Claim 62 under 35 U.S.C. §103(a) as being unpatentable over <u>Skillman et al.</u> and <u>Fischer</u> as applied to Claim 60 and further in view of <u>Waclawsky</u> (U.S. Patent No. 5,493,689) These rejections are respectfully disagreed with and are traversed below.



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The arguments and remarks made previously are repeated and incorporated by reference herein and, in particular, the aforementioned description of Skillman et al. and Fischer.

As previously noted by the Examiner, "Skillman does not explicitly teach that the instructions/script proceed from a first one to a second one of the distributed processing modules for processing a next instruction of the overall processing." The Examiner replies on Fischer to cure this deficiency and states that "Fischer teaches distributed data processing, wherein instructions (traveling program) proceed from a first one to a second one of the distributed processing modules (transmits itself to the next destination) for processing a next instruction in the sequence of the overall processing (to collect, edit and approve data)." In respectful disagreement with the Examiner, it is submitted that there is no teaching or suggestion to combine these documents absent Applicants disclosure, only an advantage in doing so to defeat Applicants' claims.

The Examiner provides as a motivation to combine these references that "Skillman teaches concurrent parallel execution of KSPs (col. 14, lines 13-53), which, to one of ordinary skill in the art, would require a mechanism to generate multiple instances of required data/processing parameters to be dispatched to each KSP." The Examiner turns to Fischer to meet this requirement and, specifically, to a process (the Examiner notes is described at Col 26, line 53 to Col. 27, line 13) for "splitting" and "merging" a traveling program so that it can be sent to a number different recipients. The splitting and merging processes involving significant overhead and processing not remotely related to a blackboard processing system as described in or contemplated by Skillman et al.

In making the proposed combination, the Examiner also appears to ignore what Skillman et al. describe as knowledge sources operating as independent tasks in response to triggers. For example, at Col. 13, line 64 to Col. 14, line 54, Skillman et al. describe, in pertinent part, that:

"For a given general task to be carried out by the blackboard processing system, each of the applications or knowledge sources executed by the KSPs can be considered as a collection of coarse-grained tasks with their own set of system function calls to access global database and scheduler information. Each knowledge source is independent of any other task, except for information or data that are required and which must first be generated by a previously executed knowledge source. Communication between knowledge sources running in different KSPs is supported



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indirectly through <u>trigger messages</u> from the BCU. Any knowledge source requiring notification of a global data element update defines a trigger condition that is used by trigger module 46 in the BCU to ensure all updates to the global data are sent by the BCU to the knowledge source in a trigger message.

Knowledge sources are of two types, including a spawn-always, which is initiated every time that an appropriate trigger signal is received from the BCU, resulting in the possibility that a <u>plurality of independent knowledge sources</u>, each with their own copy of execution codes and unique data on which to operate, are executed in response to the trigger signal, and a spawn-once knowledge source, which is initiated one time by BCU 106 after the first trigger condition is detected, and then subsequently initiated each time that the trigger condition is detected. BCU 106 maps spawn-always knowledge sources to the least loaded KSP, while a spawn-once knowledge source may need to be mapped to a specific KSP to accommodate requirements for hardware associated with that KSP. Each knowledge source can be thought of as an object that must be sent a trigger message by the scheduler module in the BCU in order for the knowledge source to execute."

Contrary to the Examiner's statement, <u>Skillman et al.</u> do describe a mechanism for generating multiple instances of required data/processing parameters to be dispatched to each KSP. These independently operating knowledge sources tend to teach away from the "splitting" and "merging" processes described by <u>Fischer</u>. In fact, it is not seen why or how, one skilled in the art would turn to Fischer's "splitting" and "merging" processes in the blackboard processing system disclosed in <u>Skillman et al.</u>, as is suggested by the Examiner.

Accordingly, it is not seen how the Examiner properly combines <u>Skillman et al.</u> and <u>Fischer</u>, and any attempt to do so can only be made in light of Applicants' disclosure. However, even if such documents were somehow combined, the proposed combination is not seen to expressly or implicitly describe or suggest receiving dynamic information within a currently processing instruction, considering such information therein and selectively executing a selected script (including the currently processing instruction) in response to the dynamic information by proceeding to a second distributed processing modules for processing a next instruction within the selected script, as is recited in the instant independent claims.

In view of the foregoing, Applicants submit that independent Claims 1, 33, 34, 60 and 63 are clearly patentable over the Examiner's proposed combination of Skillman et al. and Fischer.



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As these independent claims are patentable over the cited documents, the claims that depend from and further limit these independent claims, must also be found to be patentable.

Accordingly, the Examiner is respectfully requested to reconsider and remove the rejection of claims 1-46, 60-61 and 63 under 35 U.S.C. §103(a).

With respect to <u>Waclawsky</u>, the Examiner states that <u>Waclawsky</u> discloses tracing execution of instructions and provides a mechanism for collecting and analyzing load data from processing modules. Without addressing this characterization of <u>Waclawsky</u>, it is submitted that <u>Waclawsky</u> is not seen to cure the deficiencies cited above with respect to <u>Skillman et al.</u> and <u>Fischer</u> and independent Claim 60, for example, where the cited documents do not describe or suggest receiving dynamic information within a currently processing instruction, considering such information in therein and selectively executing a selected script (including the currently processing instruction) in response to the dynamic information by proceeding to a second distributed processing modules for processing a next instruction within the selected script.

Since <u>Waclawsky</u> is not seen to cure these deficiencies, Cclaim 62 is deemed patentable over the Examiner's proposed combination of <u>Skillman et al.</u>, <u>Fischer</u> and <u>Waclawsky</u>. Therefore, the Examiner is respectfully requested to reconsider and remove the rejection of claim 62 under 35 U.S.C. §103(a).

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Accordingly, the Examiner is respectfully requested to enter the proposed amendments, to reconsider and remove the rejections of all of the pending claims and to allow the application as now presented. If a notice of allowance cannot be issued, it is respectfully requested that the undersigned attorney of record be contacted to resolve any outstanding issues.

Respectfully submitted, Richard K. SCHULTZ et al.

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